AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A ~~C~~communication satellite facility comprising a first satellite at least having a receiving antenna adapted to receive radio-frequency signals transmitted from a ground station, down converter means adapted to convert the radio-frequency signals received by said receiving antenna to intermediate frequency signals, a transmitting antenna adapted to transmit radio-frequency signals to the ground station, up converter means adapted to the intermediate frequency signals to be transmitted again to the radio-frequency signals, switching means adapted for switching/routing the transmitted/received ~~said~~ radio-frequency signals and wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said first satellite and a second satellite; and

said second satellite at least having wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and said first satellite ~~and~~, modulating/demodulating means adapted to modulate/demodulate the signals transmitted and received by said wideband intersatellite communication means, and a circuit switching unit for a data link layer and a network layer to conduct baseband signal processing.

2. (Cancelled)

3. (Currently Amended) The communication satellite facility defined by claim 1, wherein the modulating/demodulating means of ~~aid~~said second satellite comprises a software modem adapted to determine and to execute at least modulating/demodulating method and/or error correcting methods in accordance with a program.

4. (Cancelled)

5. (Original) The communication satellite facility defined by claim 1, wherein said second satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and a third satellite; and

said third satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said third satellite and said second satellite and digital signal processor means adapted to process and store at least a part of the signals used for said bidirectional wideband intersatellite communication.

6. (Cancelled)

7. (Original) The communication satellite facility defined by claim 3, wherein said second satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and a third satellite;

and said third satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said third satellite and said second satellite and digital signal processor means adapted to process and store at least a part of the signals used for said bidirectional wideband intersatellite communication.

8. (Cancelled)

9. (Currently Amended) A ~~S~~satellite communication system comprising a first satellite at least having a receiving antenna adapted to receive radio-frequency signals transmitted from a ground station, down converter means adapted to convert the radio-frequency signals received by said receiving antenna to intermediate frequency signals, a transmitting antenna adapted to transmit radio-frequency signals to the ground station, up converter means adapted to the intermediate frequency signals to be transmitted again to the radio-frequency signals, switching means adapted for switching/routing the transmitted/received said radio-frequency signals and wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said first satellite and a second satellite;

said second satellite at least having wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and said first satellite ~~and~~, modulating/demodulating means adapted to modulate/demodulate the signals transmitted and received by said wideband intersatellite communication means, and a circuit switching unit for a data link layer and a network layer to conduct baseband signal processing; and

said ground station at least having an antenna adapted for ~~transmission/receiving~~transmitting/receiving radio-frequency signals between said ground station and said first satellite, ground station signal processor means adapted to process the transmitted/received signals at least inclusive of modulation/demodulation in accordance with a given communication method and interface means to a ground network.

10. (Original) The satellite communication system defined by claim 9, wherein said first satellite and said second satellite are deployed on geosynchronous orbit and radially spaced from each other within one and same orbit slot by a distance of approximately 1 km-10 km.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The satellite communication system defined by claim 9, wherein the modulating/demodulating means of ~~aid~~said second satellite comprises a software modem adapted to determine and to execute at least modulating/demodulating method and/or error correcting methods in accordance with a program.

14. (Currently Amended) The satellite communication system defined by claim 10, wherein the modulating/demodulating means of ~~aid~~said second satellite comprises a software modem adapted to determine and to execute at least modulating/demodulating method and/or error correcting methods in accordance with a program.

15. (Cancelled)

16. (Cancelled)

17. (Original) The satellite communication system defined by claim 9, wherein said second satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and a third satellite; and

said third satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said third satellite and said second satellite and digital signal processor means adapted to process and store at least a part of the signals used for said bidirectional wideband intersatellite communication.

18. (Original) The satellite communication system defined by claim 10, wherein said second satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and a third satellite; and

said third satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said third satellite and said second satellite and digital signal processor means adapted to process and store at least a part of the signals used for said bidirectional wideband intersatellite communication.

19. (Cancelled)

20. (Cancelled)

21. (Original) The satellite communication system defined by claim 13, wherein said second satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and a third satellite; and

said third satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said third satellite and said second satellite and digital signal processor means adapted to process and store at least a part of the signals used for said bidirectional wideband intersatellite communication.

22. (Original) The satellite communication system defined by claim 14, wherein said second satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said second satellite and a third satellite; and

said third satellite is provided with wideband intersatellite communication means adapted for bidirectional wideband intersatellite communication between said third satellite and said second satellite and digital signal processor means adapted to process and store at least a part of the signals used for said bidirectional wideband intersatellite communication.

23. (Cancelled)

24. (Cancelled)

25. (Original) The satellite communication system defined by claim 17, wherein said third satellite is deployed within a geosynchronous orbit slot common to said first satellite and said second satellite so that the respective satellites are radially spaced one from another approximately by a distance of 1 km-10 km.

26. (Original) The satellite communication system defined by claim 9, wherein said ground station signal processor means has a software modem function to determine and to execute at least modulating and demodulating method and/or error correcting method according to a program.